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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/810,853

03/29/2004

Stephen R. Forrest

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EXAMINER

TADESSE, YEWEBDAR T

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

07/09/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/810,853	Applicant(s) FORREST ET AL.	
	Examiner YEWEBDAR T. TADESSE	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 5, 11, 12 and 15-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10, 13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/15/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of group I species A in the reply filed on 04/29/2008 is acknowledged. The traversal is on the ground(s) that there is not feasible method known to the applicants to produce a nonsocial reservoir surrounded by cladding or use of the devices of group I other than for the deposition of the materials. This is not found persuasive because as admitted by the applicants' specification (see page 3) the device including a reservoir may be used to remove material from the substrate in addition to deposit material to the substrate. The determination of serious burden is left to the examiner. In this case, as explained in the restriction/election requirement, each group has distinct invention. Search and consideration of the three group inventions in addition to species of the inventions increases the time needed to provide a determination of patentability by increasing the review of prior art of each invention.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 5, 11-12 and 15-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 04/29/2008.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6-9 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Valaskovic et al (US 5,788,166).

Regarding claims 1 and 7-8, Valaskovic et al discloses (see Fig 3) a device comprising a base (12), a metal or metal oxide cladding coating (layer 44) on the base; a reservoir defined by the base and the cladding, wherein the reservoir has an opening; and wherein the largest dimension of the opening is less than about 200 nm or 100 nm or 60 nm (see column 4, lines 33-43).

As to claim 2, in Valaskovic et al a volume is removed from the base inside the cladding.

With respect to claims 3-4, in Valaskovic et al a material is disposed within the reservoir and the material is capable of being an organic material.

As to claim 6, Valaskovic et al discloses gold cladding (see column 4, line 65).

Regarding claim 9, Valaskovic et al discloses a position control apparatus (items 14 and 20; see Fig 1) attached to the base (12).

As to claim 13, Valaskovic et al discloses (see Fig 2) an energy application apparatus (power supply through electrical contact 30) coupled to the base.

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5. Claims 1-4, 6-8 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hsieh (US 5,969,353).

As to claims 1 and 7-8, Hsieh discloses (see Fig 1) a device comprising a base (tip 50), a metal or metal oxide cladding coating on the base; a reservoir defined by the base and the cladding (see column 3, lines 6-9), wherein the reservoir has an opening; and wherein the largest dimension of the opening is less than about 200 nm or 100 nm or 60 nm (see column 3, lines 1-5).

As to claim 2, in Hsieh a volume is removed from the base inside the cladding.

With respect to claims 3-4, in Hsieh a material is disposed within the reservoir and the material is capable of being an organic material.

As to claim 6, Hsieh teaches gold cladding (see column 3, line 51).

As to claim 13, Hsieh discloses (see Fig 1) an energy application apparatus (73) coupled to the base.

6. Claims 1-4 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor et al (US 6,941,033).

Regarding claims 1 and 7-8, Taylor et al discloses (see Fig 1) a device comprising a base (fiber core), a metal or metal oxide cladding coating on the base; a reservoir (hole 14) defined by the base and the cladding, wherein the reservoir has an opening; and wherein the largest dimension of the opening is less than about 200 nm or 100 nm or 60 nm (see column 7, line 33 and claim 23).

As to claim 2, in Taylor et al a volume is removed from the base inside the cladding.

With respect to claims 3-4, in Taylor et al a material is disposed within the reservoir and the material is capable of being an organic material.

As to claim 6, Taylor et al discloses gold cladding (see column 8, line 65).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Valaskovic et al (US 5,788,166) as applied to claim 9 and further in view of Iyoki (2002/0076184).

Valaskovic et al discloses a device having a position control apparatus (see Fig 1). A position control apparatus comprising a piezoelectric component is not taught in Valaskovic et al. However, it is well known in the art to use a piezoelectric element to control the positioning of a device relative to the target such as shown by Iyoki (see items 4 and 22 of Fig 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a piezoelectric component to adjust the positioning of the device relative to the target.

10. Claims 9 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al (US 6,941,033) as applied to claim 1 and further in view of Iyoki (2002/0076184).

11. Taylor et al discloses a base comprising optical fiber and an energy (laser) application to an optical fiber (fiber probe) of the base (hole 12) to initiate the uptake of material (see column 2, lines 53-56). However, a light source optically connected to the optical fiber and position control apparatus comprising a piezoelectric component are not taught in Taylor et al. Yet, Iyoki discloses (see Fig 3) a piezoelectric component (4 and 22) for controlling the positioning of a tip of optical fiber and a laser source (53) in communication with the optical fiber (see Fig 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a laser source in

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Taylor et al to detect the intensity of the light. It would have also been obvious to one of ordinary skill in the art at the time the invention was made to include a piezoelectric component to adjust the positioning of the device relative to the target.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wood et al (US 6,670,607) teaches nano-spray emitter using laser pulling techniques (see column 4, lines 30-42).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YEWEBDAR T. TADESSE whose telephone number is (571)272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yewebdar T Tadesse/
Primary Examiner, Art Unit 1792